

MDCAT Physics Chapter 13 Deformation of Solids MCQ's Test

Sr	Questions	Answers Choice
1	In a crystal the density of atoms or molecules does not vary from direction to direction. This is known as:	A. Cleavage B. Anisotropy C. Homogeneity D. None of these
2	When a silicon crystal is doped with a trivalent element, then the atom of the trivalent element is known as	A. acceptor B. donor C. either of them D. none of them
3	In the doping process, the ratio of the doping atoms to the semi-conductor atom is	A. 1 to 10 B. 1 to $10^{³}$ C. 1 to $10^{⁶}$ D. 1 to $10^{⁹}$
4	220 cm ³ of water, when subjected to a stress of 100 atmosphere, becomes 219 cm ³ . Find the bulk modulus of water	A. 100 N m ⁻³ B. 100 N m ⁻² C. 22000 N m ⁻³ D. 22000 N m ⁻²
5	Is there any physical distinction between the valence and conduction band	A. Yes B. No C. Very small D. None of these
6	Arsenic antimony or phosphorus are impurities of	A. p-type B. n-type C. May be p-type or n-type D. None of these
7	The substances in which, atom are so oriented that their field support each other and the atoms behave like tiny magnets, are called	A. diamagnetic substances B. ferromagnetic substances C. paramagnetic substances D. all of them
8	The units of modulus of elasticity are same as that of	A. Stress B. Strain C. Force D. None
9	Each atom in a metal crystal vibrates about a fixed point with a amplitude that:	A. Decreases with rise in temperature B. Is not affected by rise in temperature C. Increases with rise in temperature D. Both B and C E. None of these
10	Ferromagnetic substances lose their magnetism when heated above a certain temperature, known as	A. critical temperature B. curie temperature C. high temperature D. fixed temperature
11	To get p-type semiconductor we add impurity from	A. 3 rd group B. 4 th group C. 5 th group D. 6 th group
12	Curie temperature is a point where:	A. Diamagnetism changes to paramagnetism B. paramagnetism changes to Diamagnetism C. Ferromagnetism changes to paramagnetism D. paramagnetism changes to Ferromagnetism
13	The reciprocal of bulk modulus is called:	A. Shear modulus B. Elasticity C. Young's modulus D. Compressibility
14	_____ is a pattern which has got one more atom at the centre of a simple cube.	A. Simple cube B. Face centered cube C. Body centered cube

D. None of these

15 The ratio of linear stress/linear strain is called as

- A. Young's modulus
- B. Bulk modulus
- C. Shear modulus
- D. Modulus

16 Which of the following is not true for a crystalline substance

- A. Shorter range order
- B. Isotropic electrical conductivity
- C. Flat surface
- D. Sharp melting point

17 Two wires of the same material have diameters in the ratio 2 : 1 if they are stretched by the same force their elongations will be in the ratio

- A. 8 : 1
- B. 1 : 8
- C. 2 : 1
- D. 1 : 4

18 Every crystalline solid has

- A. definite melting point
- B. different melting points
- C. may or may not be definite
- D. none of them

19 Each domain contains the atoms of range of

- A. 10^{10} to 10^{18}
- B. 10^{10} to 10^{16}
- C. 10^{12} to 10^{17}
- D. 10^{12} to 10^{16}

20 When relatively simple molecules are chemically combined into massive molecules, the reaction is called:

- A. Fission reaction
- B. Fusion reaction
- C. Polymerization reaction
- D. Any of these
- E. None of these